

Abstract of the Disclosure

A method of and apparatus for heating a wafer employ a fluid heat transfer medium. Heat to be supplied to a wafer is generated by a heat source. Heat from the heat source is transferred to the fluid heat transfer medium to thereby evaporate a liquid component thereof. The fluid heat transfer medium is confined in a space provided between the heat source and the solid heat transfer medium. Heat of the vapor is transferred to the solid heat transfer medium and the vapor condenses back into a liquid component. The wafer is thus heated by the solid heat transfer medium. In this way, the wafer can be heated uniformly, that is, with a very small temperature deviation at the surface thereof. The thermal shock experienced by the wafer and a photoresist film formed on the wafer is correspondingly small. Accordingly, the method of the present invention can enhance a photolithography process used to form a patterned resist on the wafer.